Figure 1

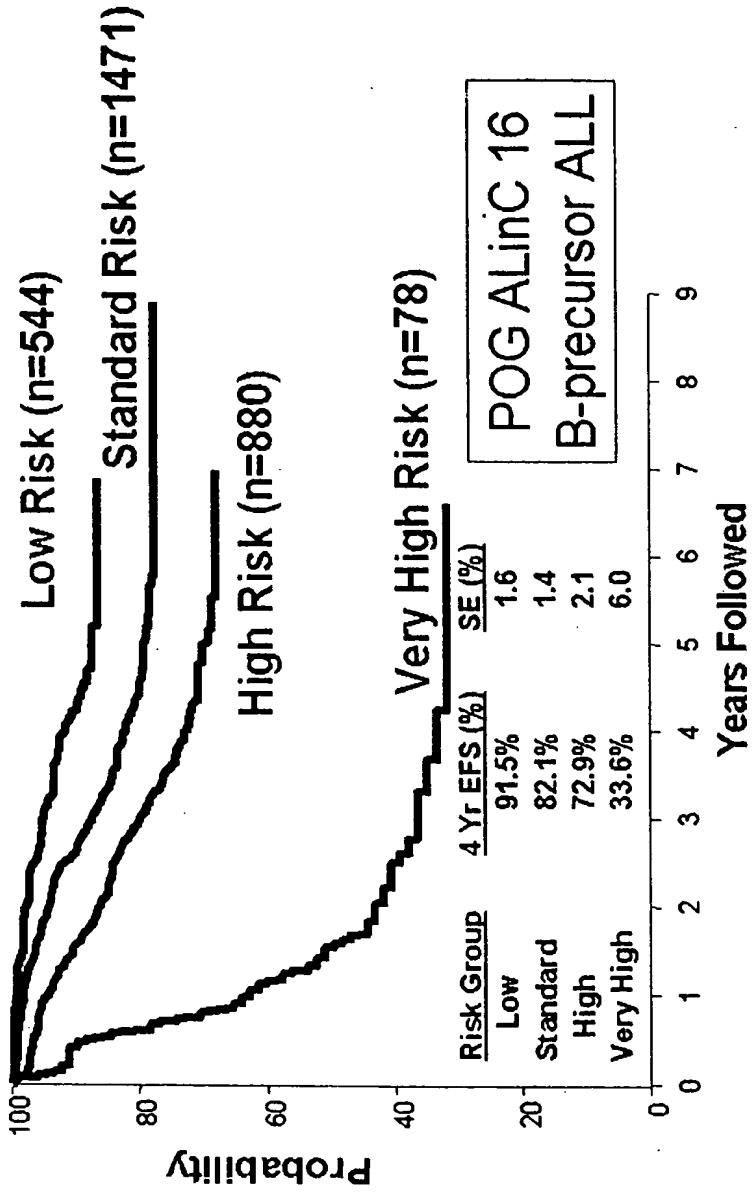

Figure 2A

G0 with Exon 1:

```
atgcctttccttttgggtcttagacaggataaggaagcctgtgtgggtaccaacaatcaa      60
 M  P  F  L  L  G  L  R  Q  D  K  E  A  C  V  G  T  N  N  Q       20

agctacatctgtgacacaggacactgctgtggacagtctcagtgctgcaactactactat     120
 S  Y  I  C  D  T  G  H  C  C  G  Q  S  Q  C  C  N  Y  Y  Y       40

gaactctggtggttctggctggtgtggaccatcatcatcatcctgagctgctgctgtgtt     180
 E  L  W  W  F  W  L  V  W  T  I  I  I  I  L  S  C  C  C  V      60
          40
tgccaccaccgccgagccaagcaccgccttcaggcccagcagcggcaacatgaaatcaac     240
 C  H  H  R  R  A  K  H  R  L  Q  A  Q  Q  R  Q  H  E  I  N      80

ctgatcgcttaccgagaagcccacaattactcagcgctgccattttatttcaggtttttg     300
 L  I  A  Y  R  E  A  H  N  Y  S  A  L  P  F  Y  F  R  F  L      100

ccaaactatttactacctccttatgaggaagtggtgaaccgacctccaactcctccccca     360
 P  N  Y  L  L  P  P  Y  E  E  V  V  N  R  P  P  T  P  P  P      120

ccatacagtgccttccagctacagcagcagcagctgctgcctccacagtgtggccctgca     420
 P  Y  S  A  F  Q  L  Q  Q  Q  Q  L  L  P  P  Q  C  G  P  A      140

ggtggcagtcccccgggcatcgatcccaccaggggatcccaggggcacagagcagcccc     480
 G  G  S  P  P  G  I  D  P  T  R  G  S  Q  G  A  Q  S  S  P      160

ttgtctgagcccagcagaagcagcacaagacccccaagcatcgctgaccctgatccctct     540
 L  S  E  P  S  R  S  S  T  R  P  P  S  I  A  D  P  D  P  S      180

gacctaccagttgaccgagcagccaccaaagccccagggatggagcccagtggctctgtg     600
 D  L  P  V  D  R  A  A  T  K  A  P  G  M  E  P  S  G  S  V      200

gctggcctgggggagctggacccgggggccttcctggacaaagatgcagaatgtagggag     660
 A  G  L  G  E  L  D  P  G  A  F  L  D  K  D  A  E  C  R  E      220

gagctgctgaaagatgacagctctgaacacggcgcacccgacagcaaagagaagacgcct     720
 E  L  L  K  D  D  S  S  E  H  G  A  P  D  S  K  E  K  T  P      240

gggagacatcgccgcttcacaggtgactcgggcattgaagtgtgtgtgtgcaaccggggc     780
 G  R  H  R  R  F  T  G  D  S  G  I  E  V  C  V  C  N  R  G      260

caccatgacgatgacctcaaagagttcaacacactcatcgatgatgctctggatgggccc     840
 H  H  D  D  D  L  K  E  F  N  T  L  I  D  D  A  L  D  G  P      280

ctggacttctgcgacagctgccatgtgcggccccctggtgatgaggaggaaggcctctgt     900
 L  D  F  C  D  S  C  H  V  R  P  P  G  D  E  E  E  G  L  C      300

cagtcctctgaggagcaggctcgagagcctgggcacccgcacctgccacggccgcccgca     960
 Q  S  S  E  E  Q  A  R  E  P  G  H  P  H  L  P  R  P  P  A      320

tgcctgctgctgaacaccatcaacgagcaggactctcccaactcccagagcagcagctcc    1020
 C  L  L  L  N  T  I  N  E  Q  D  S  P  N  S  Q  S  S  S  S      340

cccagctagagcaggtcctgccagcacccagcaacttggcaaagcaaccagggtagggga    1080
P  S  -                                                          342
```

Figure 2B

G0 with Exon 1a:

```
atggagaggagaaggctcctgggtggcatggcgctcctgctcctccaggcgctgcccagc     60
 M  E  R  R  R  L  L  G  G  M  A  L  L  L  L  Q  A  L  P  S      20

cccttgtcagccagggctgaaccccccgcaggataaggaagcctgtgtgggtaccaacaat    120
 P  L  S  A  R  A  E  P  P  Q  D  K  E  A  C  V  G  T  N  N      40

caaagctacatctgtgacacaggacactgctgtggacagtctcagtgctgcaactactac    180
 Q  S  Y  I  C  D  T  G  H  C  C  G  Q  S  Q  C  C  N  Y  Y      60

tatgaactctggtggttctggctggtgtggaccatcatcatcatcctgagctgctgctgt    240
 Y  E  L  W  W  F  W  L  V  W  T  I  I  I  I  L  S  C  C  C      80

gtttgccaccaccgccgagccaagcaccgccttcaggcccagcagcggcaacatgaaatc    300
 V  C  H  H  R  R  A  K  H  R  L  Q  A  Q  Q  R  Q  H  E  I     100

aacctgatcgcttaccgagaagcccacaattactcagcgctgccattttatttcaggttt    360
 N  L  I  A  Y  R  E  A  H  N  Y  S  A  L  P  F  Y  F  R  F     120

ttgccaaactatttactacctccttatgaggaagtggtgaaccgacctccaactcctccc    420
 L  P  N  Y  L  L  P  P  Y  E  E  V  V  N  R  P  P  T  P  P     140

ccaccatacagtgccttccagctacagcagcagcagctgctgcctccacagtgtggccct    480
 P  P  Y  S  A  F  Q  L  Q  Q  Q  Q  L  L  P  P  Q  C  G  P     160

gcaggtggcagtcccccgggcatcgatcccaccaggggatcccaggggcacagagcagc    540
 A  G  G  S  P  P  G  I  D  P  T  R  G  S  Q  G  A  Q  S  S     180

cccttgtctgagcccagcagaagcagcacaagacccccaagcatcgctgaccctgatccc    600
 P  L  S  E  P  S  R  S  S  T  R  P  P  S  I  A  D  P  D  P     200

tctgacctaccagttgaccgagcagccaccaaagccccagggatggagcccagtggctct    660
 S  D  L  P  V  D  R  A  A  T  K  A  P  G  M  E  P  S  G  S     220

gtggctggcctgggggagctggacccgggggccttcctggacaaagatgcagaatgtagg    720
 V  A  G  L  G  E  L  D  P  G  A  F  L  D  K  D  A  E  C  R     240

gaggagctgctgaaagatgacagctctgaacacggcgcacccgacagcaaagagaagacg    780
 E  E  L  L  K  D  D  S  S  E  H  G  A  P  D  S  K  E  K  T     260

cctgggagacatcgccgcttcacaggtgactcgggcattgaagtgtgtgtgtgcaaccgg    840
 P  G  R  H  R  R  F  T  G  D  S  G  I  E  V  C  V  C  N  R     280

ggccaccatgacgatgacctcaaagagttcaacacactcatcgatgatgctctggatggg    900
 G  H  H  D  D  D  L  K  E  F  N  T  L  I  D  D  A  L  D  G     300

cccctggacttctgcgacagctgccatgtgcggcccctggtgatgaggaggaaggcctc    960
 P  L  D  F  C  D  S  C  H  V  R  P  P  G  D  E  E  E  G  L     320

tgtcagtcctctgaggagcaggctcgagagcctgggcacccgcacctgccacggccgccc   1020
 C  Q  S  S  E  E  Q  A  R  E  P  G  H  P  H  L  P  R  P  P     340

gcatgcctgctgctgaacaccatcaacgagcaggactctcccaactcccagagcagcagc   1080
 A  C  L  L  L  N  T  I  N  E  Q  D  S  P  N  S  Q  S  S  S     360

tcccccagctagagcaggtcctgccagcacccagcaacttggcaaagcaaccagggtagg   1140
 S  P  S  -                                                     363
```

Figure 2C

TGTTTACTTTGTCTGCTTTGCTAAAGAAGGCCGGTGAACCAGGACCACCGCACACACAGG 60
CCCACCAGGGGCAATGCTCATTCCAAGACCTTAACTTTTAAGAGCCCTTTGTTCCAACGT 120
TAGTGTGGACGATGCTCTTGCAGGATGCCTTTCCTTTTGGGTCTTAGACAGGATAAGGAA 180
GCCTGTGTGGGTACCAACAATCAAAGCTACATCTGTGACACAGGACACTGCTGTGGACAG 240
TCTCAGTGCTGCAACTACTACTATGAACTCTGGTGGTTCTGGCTGGTGTGGACCATCATC 300
ATCATCCTGAGCTGCTGCTGTGTTTGCCACCACCGCCGAGCCAAGCACCGCCTTCAGGCC 360
CAGCAGCGGCAACATGAAATCAACCTGATCGCTTACCGAGAAGCCCACAATTACTCAGCG 420
CTGCCATTTTATTTCAGGTTTTTGCCAAACTATTTACTACCTCCTTATGAGGAAGTGGTG 480
AACCGACCTCCAACTCCTCCCCCACCATACAGTGCCTTCCAGCTACAGCAGCAGCAGCTG 540
CTGCCTCCACAGTGTGGCCCTGCAGGTGGCAGTCCCCCGGGCATCGATCCCACCAGGGGA 600
TCCCAGGGGGCACAGAGCAGCCCCTTGTCTGAGCCCAGCAGAAGCAGCACAAGACCCCCA 660
AGCATCGCTGACCCTGATCCCTCTGACCTACCAGTTGACCGAGCAGCCACCAAAGCCCCA 720
GGGATGGAGCCCAGTGGCTCTGTGGCTGGCCTGGGGGAGCTGGACCCGGGGGCCTTCCTG 780
GACAAAGATGCAGAATGTAGGGAGGAGCTGCTGAAAGATGACAGCTCTGAACACGGCGCA 840
CCCGACAGCAAAGAGAAGACGCCTGGGAGACATCGCCGCTTCACAGGTGACTCGGGCATT 900
GAAGTGTGTGTGTGCAACCGGGGCCACCATGACGATGACCTCAAAGAGTTCAACACACTC 960
ATCGATGATGCTCTGGATGGGCCCCTGGACTTCTGCGACAGCTGCCATGTGCGGCCCCCT 1020
GGTGATGAGGAGGAAGGCCTCTGTCAGTCCTCTGAGGAGCAGGCTCGAGAGCCTGGGCAC 1080
CCGCACCTGCCACGGCCGCCCGCATGCCTGCTGCTGAACACCATCAACGAGCAGGACTCT 1140
CCCAACTCCCAGAGCAGCAGCTCCCCCAGCTAGAGCAGGTCCTGCCAGCACCCAGCAACT 1200
TGGCAAAGCAACCAGGGTAGGGGAGAACCACGAGAGAAGCATTAAGTGACTTTCAAAGAC 1260
TTTCAGAGTACAGCCACTTGGTTCCTTTTTGTTTGTTTTCCTTCTCCTCTCCTGCATTTT 1320
CCTCCATCTCCAGGTACAGTTCGGGGTGTGGATGCCTCTTCCTCCACAAGGGCACAGTGT 1380
TGTGGAGGGCTAAGTTGGTTCTGTGACTCATTCCTCATACCCTAACTCCATCTCCTTTCT 1440
TTAAAGTCAAATCTCACCTACCTGTTTGGGTCAGAGAGATGTGTTTTGAAAGCCCCCAAG 1500
GAAGGAGGCTGGGACTGTGCCCTGACATGATTCTTGGTGATGGAATAGGTTTGTGCTCTG 1560
ATTCTAGTTTAAGAGAACGTTGCTGTATCTCAGTCCAGGAGAGGCAGCCCATCTTGGCCC 1620
TGGATGAAGAAGGAAACCCACAGAGGCCCAGGGCTTGTCATTGGGCTGCCAGTGTCTGCC 1680
AAGCCAGCATTGAGCTAATCCTGTGGGAGGATGAGAGCTACTGGGCCGTTGTATGATAGG 1740
TTGGTAGGGGCTTGTTGATCTGTCAAATTCCAGGTGACAAGATCTATGCACCCCATGCGT 1800
CCTTGAGGGGCCTCTTCCCCGCAGGCTCTGGCTGGCCGCAGGCTGGTTCTGGTGTGAAAG 1860
GTTATACTGCCTTTTCTTTGTTTGTTTGTTTTTTTCTCTAAAAACAAACAGCAAAAGACA 1920
GCTGAAAACAAGAACTTCACCGGTGGGCAGGCAAGAATTCTCTTCTGGAAAATGACGTTT 1980
GTGGCTCTTTCCCAAGTTGGCCTTCAAAGAGCCTGCCTGCTGTTGAGCCAGAAGATGTCT 2040
CGTGTGAAGGCTGGGGTGGCGGCTGTCTTGGAACCTCTGTGAGCAGGAGGCCCTAAGCCG 2100
CAGCAGTGGATAGAGGTGCAGCTCTCTGCCTCTCTGCCCTTTGGTCTGTGTTCACAGGTG 2160
ACCCGTGTCAGCCTGCATCGCAAGCACACACCCTGCGGGCCTTCAAGTCTCACTGTTCCG 2220
TATGAGGAAACAGACAGCGGACTGAGGAAGCGATGGCCCCAGAGAAAGGGCCCCTGTAGC 2280
CTGGCTCTCACACAGTATTTTATCTTTGATTCTGAATAAATATTTTTTGTGGGGTTTTTT 2340
TTTTTTTTTTGGTGGCAGTTGTTTGTTTTAAACTGACCACTTGGAAGAAACACCTTGGTT 2400
ATCTGTGGTTTTCATGCCTTGTCCCTGCCTCTACCCCCACCCCTTTTGAGTCGGGTGACT 2460
CATTTTTCTGTGTAGAGACTCGGTGGCCCAGGCAGGAGGTGAAAGCAGCCATCCGGAAGG 2520
CCCTGGGGACCCTTGTGCCTGTTGCTCGCCTTCAGGTCACCAGCTGAGCTGCGATAGGAA 2580
AATCTGAATGGAGGCAGCAAACAGCCAAAACAAACATTCCCCACCCGGCCCTGTGCATAT 2640
GAAGTCTTTCTTCCCCCAACTCTTGAACGATGATGATATTCAGACGAAGCATTGATGTTA 2700
TGGAAGAAAGAAAGAAACAAACAAAAAATATATATATATGTCCAAAAACAGACAAATCCA 2760
AGGGTGTGAGGTAAACGAGTGTCTGCATTTAGATTCCACAAAACCAAAATCCATGTTGAA 2820
CAAAGTTAAGTCCGTACACAGTGACTTTTTGGGTGAGCCGTGTGTGTCTGTCTGTTGTGT 2880
GTGTGCCTCAAGCCCTGTTTTCCTGTGAAGATACTTTGAGTGGCAGCCATTCTCTCCACG 2940
TGAACCACACGTCTGGAGCACAGACAGGCCTCTCAAGGTCATTGATCTTACGCATTTACT 3000
GTTTACCGAACAAATGTCTGACTGTGTACTCGGGTGTACTCCGCAGCATTGTCGACTGCA 3060
GTCCCCTGTGTTTGCCAGAGATACTGTGCTCGAAGTAGAGGTTTTACTCTACTCATCACT 3120
GCGATTTGCACATTGCTCCGTGGACACTCGGAGGCCTGCGTTCTGTTCCCTATAAATGGA 3180
AGCGTGCTCTGAGCCTGTCTGCCTCCCTCGGCTGCTGCTGGTCCTCAGTACCAGCGCCCG 3240
GGGGTGTCCACAACCACTTGGGACAGAAGAAGGTGGAATTTCAGACAGAAGCTTGACTGG 3300
GTCTTCAATGACAGGCTTGGACTAGCTGTGGCCCAGACATCGGCCCTGCCCAGAATTGCC 3360
AGGAGGAGGCTTTGCAGGCTCTAGAGGAGCCGCAGGGCCTGCCTGCCTCTGGTGAGTCCA 3420
ACAGGCACAAGCAAGCTGGCGTGTGGCCAGAGGTAGCCGGAGTGTGTCACAGCCCCTCAG 3480

Figure 2C (continued)

ATGCCTTTCCTTCCACCTTTTTTTTTATTTTTTAAGAATCCCAAATAACTCACTGAAGTG 3540
TCTCAAAGGCGAACAAGTTTTACCAAAATGAATCCTTTTTCAGTTAACAGATCAAATGGA 3600
TGAGTTCTGAGCCTCTCAAGTTCCTTTCCCCAGTTAGAGTGGGGAACTGGGCAAGTGTTA 3660
ACTGTGGGACTCACTGCAGCGTCCTATCCTAAAGGCACGAGAAGACGGAAATGCAACCTG 3720
CGGAGCTGGGCTTGGTTCCCAGGTCACAGTTTGGCCCCCGCTACAGGATGCTGCCCTGCT 3780
CAGAGAGAGATTTAATAGGGAGCTGAAGGAATCGTTAGGGGGCCAGGGAGATGTGACTGA 3840
GGCTGGCTTTCCACGTGAATGAGACGGGGTCGGTGGAGGGTTTGGTGCTACAGCCAGTCA 3900
GAAGATTTGCAAATGCGAACACATTCCTGTGTGAGGCACGTTACCCTTTGTCAGTTATTG 3960
TGAATATGTGTATTTTAAGCAATAAGATTCAGCTGGTCAGACTTTTCTGGGCAGTCTCAG 4020
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GCCCA**AATAAA**AATTGATCCCAAAAATGAAAAAAAAAAAAAA 4122

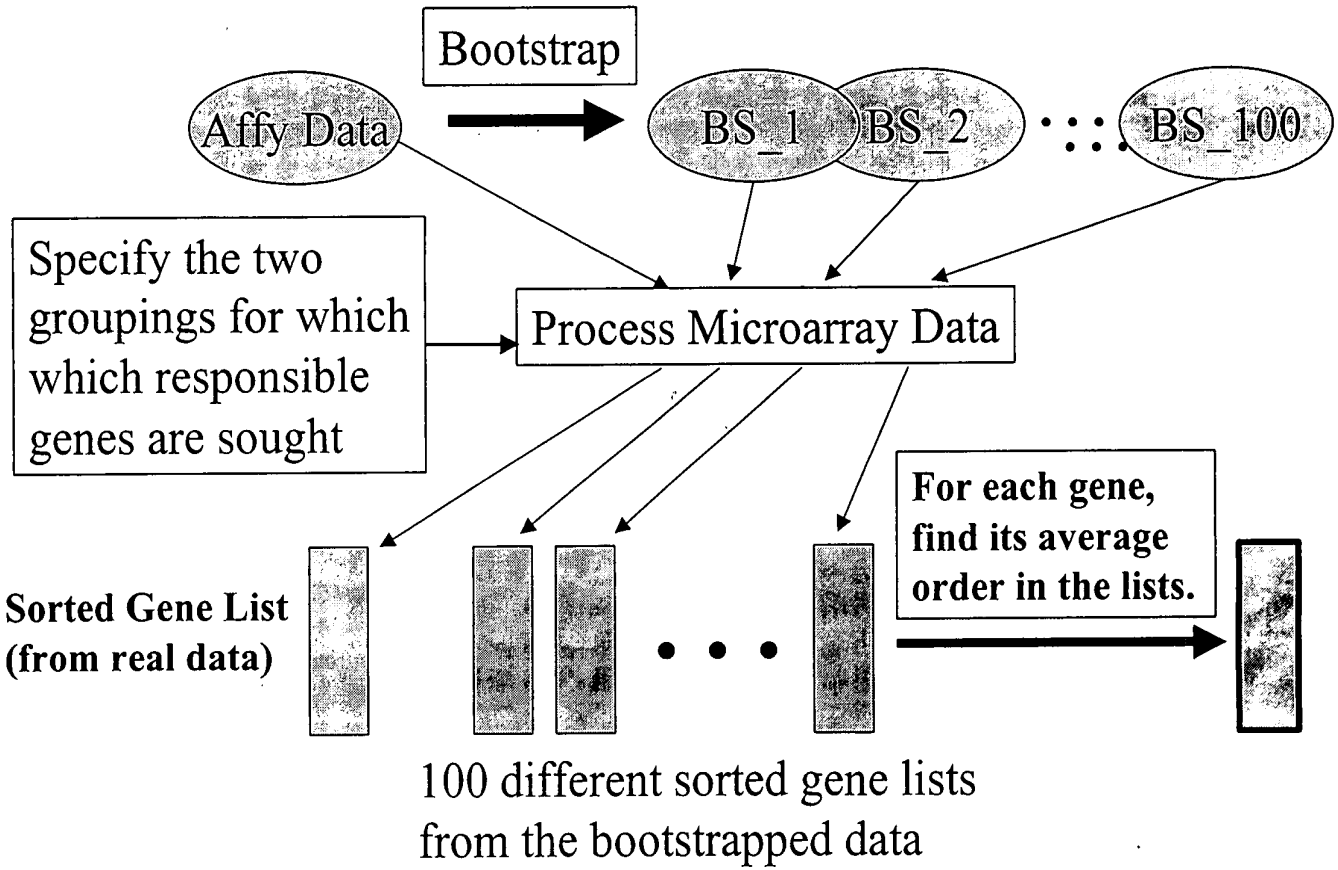

Bootstrap
Affy Data
BS_1
BS_2
BS_100
Specify the two groupings for which which responsible genes are sought
Process Microarray Data
For each gene, find its average order in the lists.
Sorted Gene List (from real data)
100 different sorted gene lists from the bootstrapped data

Figure 3

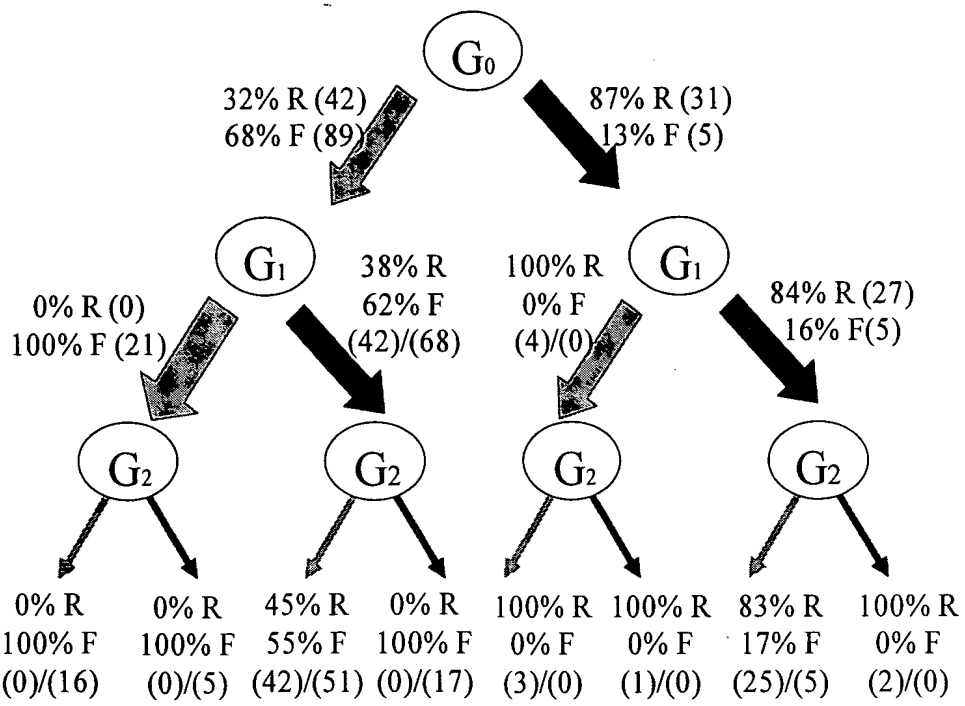
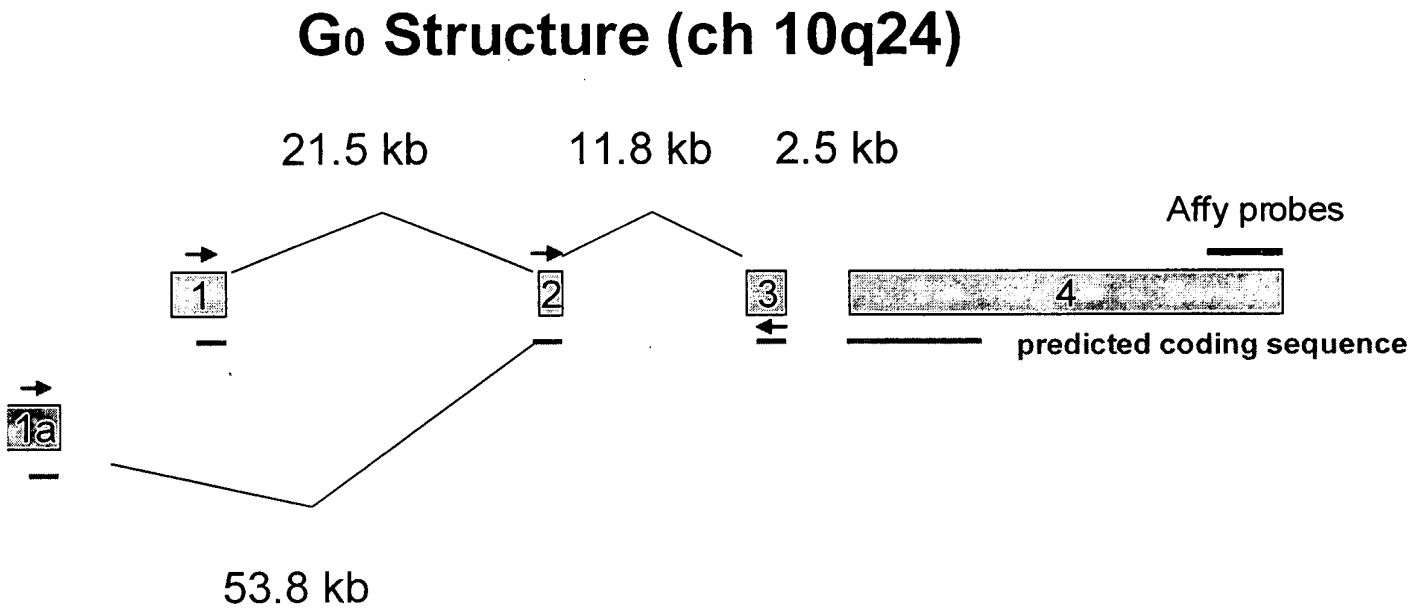

G0
32% R (42)
68% F (89)
87% R (31)
13% F (5)
G1
G1
0% R (0)
100% F (21)
38% R
62% F
(42)/(68)
100% R
0% F
(4)/(0)
84% R (27)
16% F(5)
G2
G2
G2
G2
0% R
100% F
(0)/(16)
0% R
100% F
(0)/(5)
45% R
55% F
(42)/(51)
0% R
100% F
(0)/(17)
100% R
0% F
(3)/(0)
100% R
0% F
(1)/(0)
83% R
17% F
(25)/(5)
100% R
0% F
(2)/(0)

Figure 4

Figure 5


G0 Structure (ch 10q24)
21.5 kb
11.8 kb
2.5 kb
Affy probes
1
2
3
4
predicted coding sequence
1a
53.8 kb

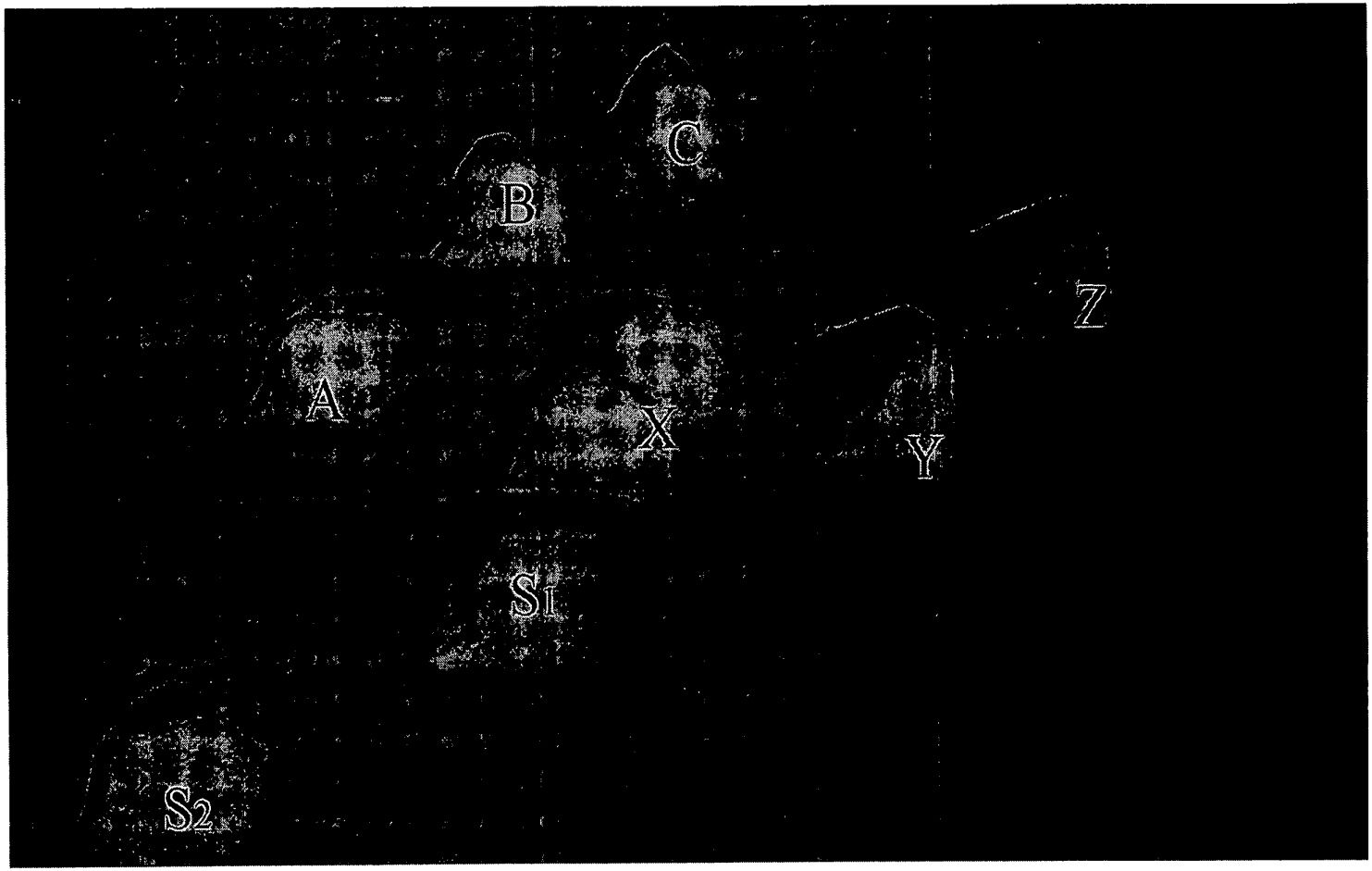


Figure 6A

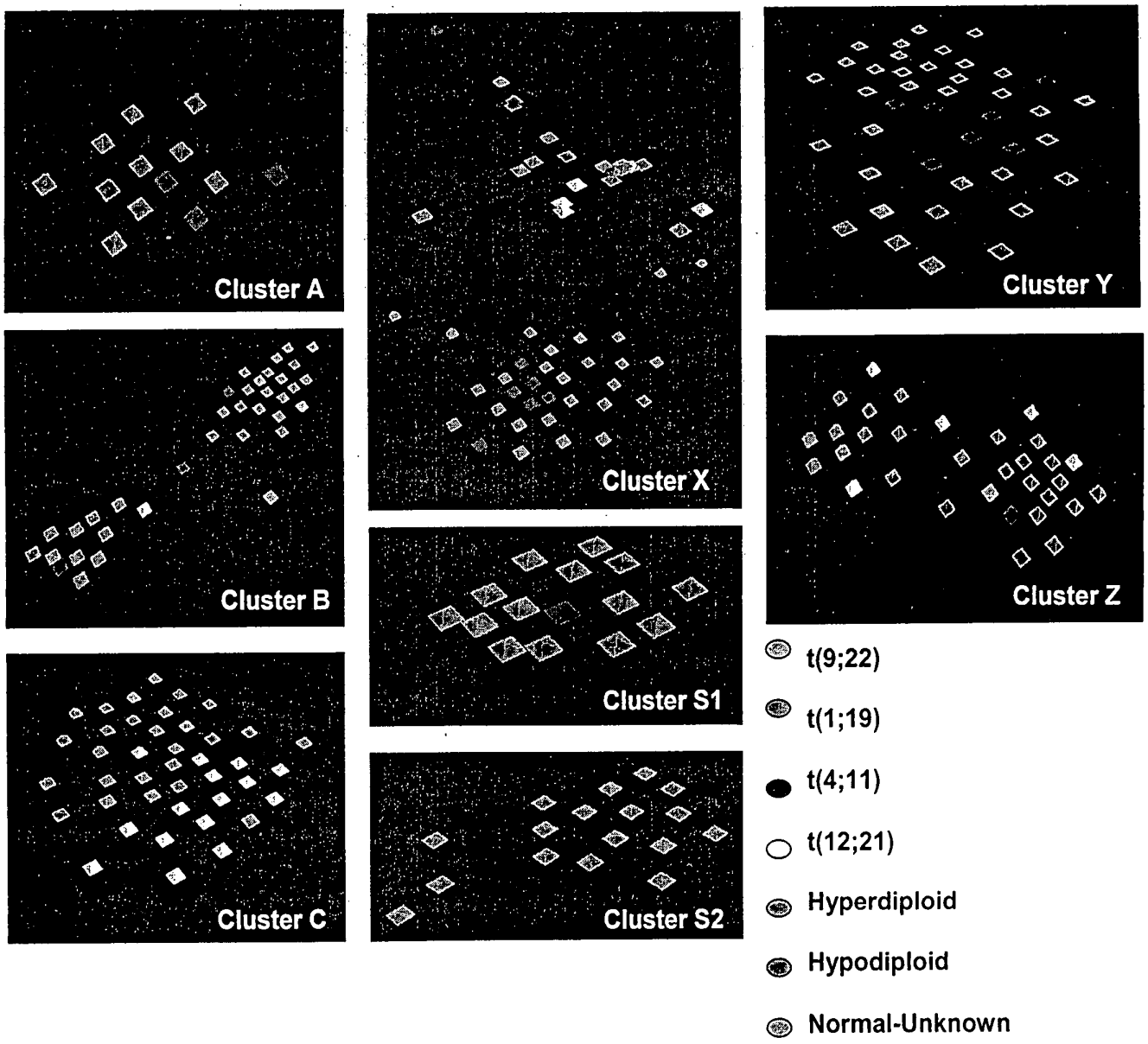

Cluster A
Cluster B
Cluster C
Cluster X
Cluster S1
Cluster S2
Cluster Y
Cluster Z
t(9;22)
t(1;19)
t(4;11)
t(12;21)
Hyperdiploid
Hypodiploid
Normal-Unknown

Figure 6B

T-cell leukemia characterizing genes by PCA		T-cell characterizing genes by VxInsight		T-ALL Group characterizing genes (from Yeoh *et al*, 2002)									
				Chi square		T statistics		Wilkins		SOM w/DA		CB-FS	
	T-ALL		T-ALL		T-ALL		T-ALL		T-ALL		T-ALL		
1	2054_g_at	1	38319_at	53	36773_f_at	1	38319_at	1	38242_at	1	38242_at	1	35016_at	1	38319_at
2	38319_at	2	38147_at	54	38750_at	2	1096_g_at	2	38319_at	2	37988_at	2	36277_at		
3	33238_at	3	39226_at	55	41609_at	3	38242_at	3	37988_at	3	1096_g_at	3	38147_at		
4	37988_at	4	33238_at	56	32793_at	4	32794_g_at	4	38147_at	4	39318_at	4	38949_at		
5	2059_s_at	5	2059_s_at	57	38893_at	5	37988_at	5	38522_s_at	5	38018_g_at	5	32649_at		
6	38147_at	6	32794_g_at	58	41723_s_at	6	38017_at	6	35350_at	6	36878_f_at	6	33238_at		
7	40688_at	7	31891_at	59	37403_at	7	35016_at	7	36277_at	7	38147_at	7	35643_at		
8	31891_at	8	38949_at	60	36473_at	8	36277_at	8	38604_at	8	35350_at	8	36473_at		
9	2057_g_at	9	37644_at	61	36941_at	9	38095_i_at	9	33705_at	9	38051_at	9	38319_at		
10	34416_at	10	38095_i_at	62	39319_at	10	39318_at	10	36878_f_at	10	266_s_at	10	39709_at		
11	32794_g_at	11	38096_f_at	63	36878_f_at	11	38147_at	11	36638_at	11	38521_at	11	40775_at		
12	36108_at	12	38051_at	64	907_at	12	41723_s_at	12	32794_g_at	12	37344_at	12	32794_g_at		
13	40570_at	13	40688_at	65	33121_g_at	13	38833_at	13	32174_at	13	34033_s_at	13	37039_at		
14	39114_at	15	1096_g_at	66	41468_at	14	33238_at	14	160041_at	14	36638_at	14	38051_at		
15	36021_at	16	1105_s_at	68	37849_at	15	37039_at	15	38521_at	15	38213_at	15	38095_i_at		
16	33440_at	17	40954_at	69	38253_at	16	38051_at	16	38018_g_at	16	41734_at	16	38096_f_at		
17	36941_at	18	35016_at	70	34033_s_at	17	37644_at	17	36571_at	17	37711_at	17	38415_at		
18	35703_at	19	40775_at	71	41819_at	18	38096_f_at	18	1096_g_at	18	36239_at	18	38833_at		
19	32649_at	20	40738_at	72	35985_at	19	2059_s_at	19	39318_at	19	38319_at	19	2059_s_at		
20	296_at	21	38547_at	73	33821_at	20	1105_s_at	20	41710_at	20	38894_g_at	20	1241_at		
21	32257_f_at	22	36277_at	74	172_at	21	32649_at	21	599_at	21	33705_at	21	1105_s_at		
22	35681_r_at	23	41165_g_at	75	37759_at	22	38949_at	22	266_s_at	22	38017_at				
23	31383_at	24	41523_at	76	36937_s_at	23	39709_at	23	36502_at	23	41156_g_at				
24	32607_at	25	38315_at	77	33641_g_at	24	41165_g_at	24	39114_at	24	38994_at				
25	32606_at	26	38917_at	78	41156_g_at	25	36473_at	25	37539_at	25	37710_at				
26	38408_at	27	38893_at	79	37890_at	26	266_s_at	26	40775_at	26	41155_at				
27	31431_at	28	39119_s_at	80	39273_at	27	40570_at	27	34033_s_at	27	40570_at				
28	1891_at	29	40147_at	81	41409_at	28	40775_at	28	2031_s_at	28	34224_at				
29	35105_at	30	37039_at	82	40155_at	29	37420_i_at	29	38051_at	29	38604_at				
30	39119_s_at	31	1110_at	83	33291_at	30	1085_s_at	30	35794_at	30	36773_f_at				
31	37251_s_at	32	39709_at	84	36658_at	31	38018_g_at	31	41156_g_at	31	32562_at				
32	1404_r_at	33	771_s_at	85	38581_at	32	35643_at	32	32979_at	32	36502_at				
		34	41164_at	86	33316_at	33	41166_at	33	32562_at	33	37180_at				
		35	39248_at	87	37598_at	34	38415_at	34	36536_at	34	38893_at				
		36	34927_at	88	36808_at	35	38893_at	35	36108_at	35	387_at				
		37	37399_at	89	39044_s_at	36	1241_at	36	41734_at	36	32035_at				
		38	1498_at		33777_at	37	32793_at	37	41153_f_at	37	41153_f_at				
		39	39930_at	90	39318_at	38	36571_at	38	37710_at	38	40780_at				
		40	40570_at			39	37399_at	39	39893_at	39	40775_at				
		41	37861_at			40	41097_at	40	37908_at	40	39402_at				
		42	37078_at							41	38522_s_at				
		43	35643_at							42	41166_at				
		44	38017_at												

T-cell genes shared between PCA & Yeoh *et al*, 2002

T-cell genes shared between VxInsight (ANOVA) and Yeoh *et al*, 2002

Present in all gene lists (PCA, VxInsight and Yeoh *et al*, 2002)

Figure 7

Bayesian (1221)	
1	35362_at
2	1325_at
3	1077_at
4	34194_at
5	32730_at
6	34745_at
7	37986_at
8	40570_at
9	40272_at
10	2036_s_at
11	35940_at
12	41097_at
13	39931_at
14	31472_s_at
15	32227_at
16	37280_at
17	36524_at
18	39824_at
19	35260_at
20	35614_at
21	37497_at
22	41814_at
23	1980_s_at
24	36008_at
25	36638_at
26	40367_at
27	32163_f_at
28	755_at
29	32724_at

Yeoh et al (1221)	
1	38652_at
2	36239_at
3	41442_at
4	37780_at
5	36985_at
6	38578_at
7	38203_at
8	35614_at
9	32224_at
10	32730_at
11	35665_at
12	1077_at
13	36524_at
14	34194_at
15	36937_s_at
16	36008_at
17	1299_at
18	41814_at
19	41200_at
20	35238_at
21	880_at
22	33690_at
23	40272_at
24	35362_at
25	41819_at
26	40279_at
27	1488_at
28	1325_at
29	37908_at
30	769_s_at
31	33415_at
32	1980_s_at
33	32579_at
34	39425_at
35	755_at
36	37343_at
37	1336_s_at
38	41097_at
39	31786_at

Bayesian (44)	
1	39327_at
2	39717_g_at
3	33412_at
4	40763_at
5	31575_f_at
6	1039_s_at
7	36873_at
8	1914_at
9	32529_at
10	32977_at
11	37724_at
12	39338_at
13	1973_s_at
14	31444_s_at
15	36897_at
16	34210_at
17	266_s_at
18	769_s_at
19	36536_at
20	38413_at
21	41170_at
22	37680_at
23	38518_at
24	36514_at
25	40396_at
26	40417_at
27	486_at
28	32232_at

Yeoh et al (44)	
1	34306_at
2	40797_at
3	33412_at
4	39338_at
5	2062_at
6	32193_at
7	40518_at
8	36777_at
9	32207_at
10	33859_at
11	38391_at
12	40763_at
13	1126_s_at
14	34721_at
15	37809_at
16	34861_at
17	38194_s_at
18	657_at
19	36918_at
20	32215_i_at
21	38160_at
22	38413_at
23	1389_at
24	34168_at
25	2036_s_at
26	40522_at
27	854_at
28	40067_at
29	39756_g_at
30	36940_at
31	36935_at
32	32134_at
33	39379_at
34	40493_at
35	769_s_at
36	40415_at
37	35983_at
38	40519_at
39	794_at

Bayesian (19)	
1	33355_at
2	36203_at
3	37306_at
4	1081_at
5	40454_at
6	1616_at
7	36452_at
8	35727_at
9	753_at
10	32069_at
11	1797_at
12	362_at
13	39829_at
14	717_at
15	854_at
16	38285_at
17	41138_at
18	40113_at
19	36069_at
20	37579_at
21	37225_at
22	39614_at
23	38748_at
24	33513_at
25	39729_at
26	37493_at
27	1788_s_at
28	39929_at
29	37701_at
30	34335_at

Yeoh et al (19)	
1	41146_at
2	1287_at
3	32063_at
4	33355_at
5	430_at
6	40454_at
7	753_at
8	33821_at
9	39614_at
10	38340_at
11	1786_at
12	39929_at
13	39379_at
14	717_at
15	362_at
16	33513_at
17	37225_at
18	854_at
19	35974_at
20	36452_at
21	40648_at
22	38393_at
23	38994_at
24	34861_at
25	38748_at
26	40113_at
27	36179_at
28	37493_at
29	578_at
30	41017_at
31	37625_at
32	38679_g_at
33	1389_at
34	34783_s_at
35	36959_at
36	39864_at
37	41862_at
38	41425_at
39	37177_at

Bayesian (922)	
1	1636_g_at
2	39730_at
3	37066_at
4	1081_at
5	33131_at
6	36031_at
7	38968_at
8	40202_at
9	36203_at
10	38119_at
11	36601_at
12	32260_at
13	34550_at
14	37399_at
15	38994_at
16	1583_at
17	1461_at
18	33885_at
19	34889_at
20	40790_at
21	38276_at
22	36543_at
23	36591_at
24	37600_at
25	675_at
26	1295_at
27	37732_at
28	669_s_at
29	38313_at
30	35256_at

Yeoh et al (922)	
1	1637_at
2	36650_at
3	40196_at
4	1635_at
5	33775_s_at
6	1636_g_at
7	41295_at
8	37600_at
9	37012_at
10	39225_at
11	1326_at
12	34362_at
13	33150_at
14	40051_at
15	39061_at
16	33172_at
17	37399_at
18	317_at
19	40953_at
20	330_s_at
21	40504_at
22	38578_at
23	39044_s_at
24	36634_at
25	38119_at
26	32552_at
27	33228_g_at
28	37066_at
29	38641_at
30	38220_at
31	1211_s_at
32	39730_at
33	36591_at
34	36035_at
35	980_at
36	671_at
37	40698_at
38	39330_s_at
39	1983_at

Bayesian Hyperdyploid	
1	35688_g_at
2	32139_at
3	40296_at
4	149_at
5	37251_at
6	37014_at
7	1272_at
8	40771_at
9	32941_at
10	38968_at
11	37001_at
12	37421_f_at
13	39755_at
14	33936_at
15	40370_f_at
16	32788_at
17	34990_at
18	40202_at
19	36927_at
20	2031_s_at
21	40518_at
22	38336_at
23	39059_at
24	547_s_at
25	36048_at
26	33061_at
27	40712_at
28	39290_f_at
29	35408_i_at
30	36103_at

Yeoh *et al.* Hyperdyploid	
1	36620_at
2	37350_at
3	171_at
4	37677_at
5	41724_at
6	32207_at
7	38738_at
8	40480_s_at
9	38518_at
10	41132_r_at
11	31492_at
12	38317_at
13	40998_at
14	35688_g_at
15	40903_at
16	36489_at
17	1520_s_at
18	35939_s_at
19	38604_at
20	31863_at
21	890_at
22	39402_at
23	41490_at
24	34753_at
25	40891_f_at
26	306_s_at
27	37640_at
28	34829_at
29	36169_at
30	38968_at
31	36128_at
32	37014_at
33	34374_g_at
34	36542_at
35	688_at
36	955_at
37	35816_at
38	38459_g_at
39	41288_at

Figure 8

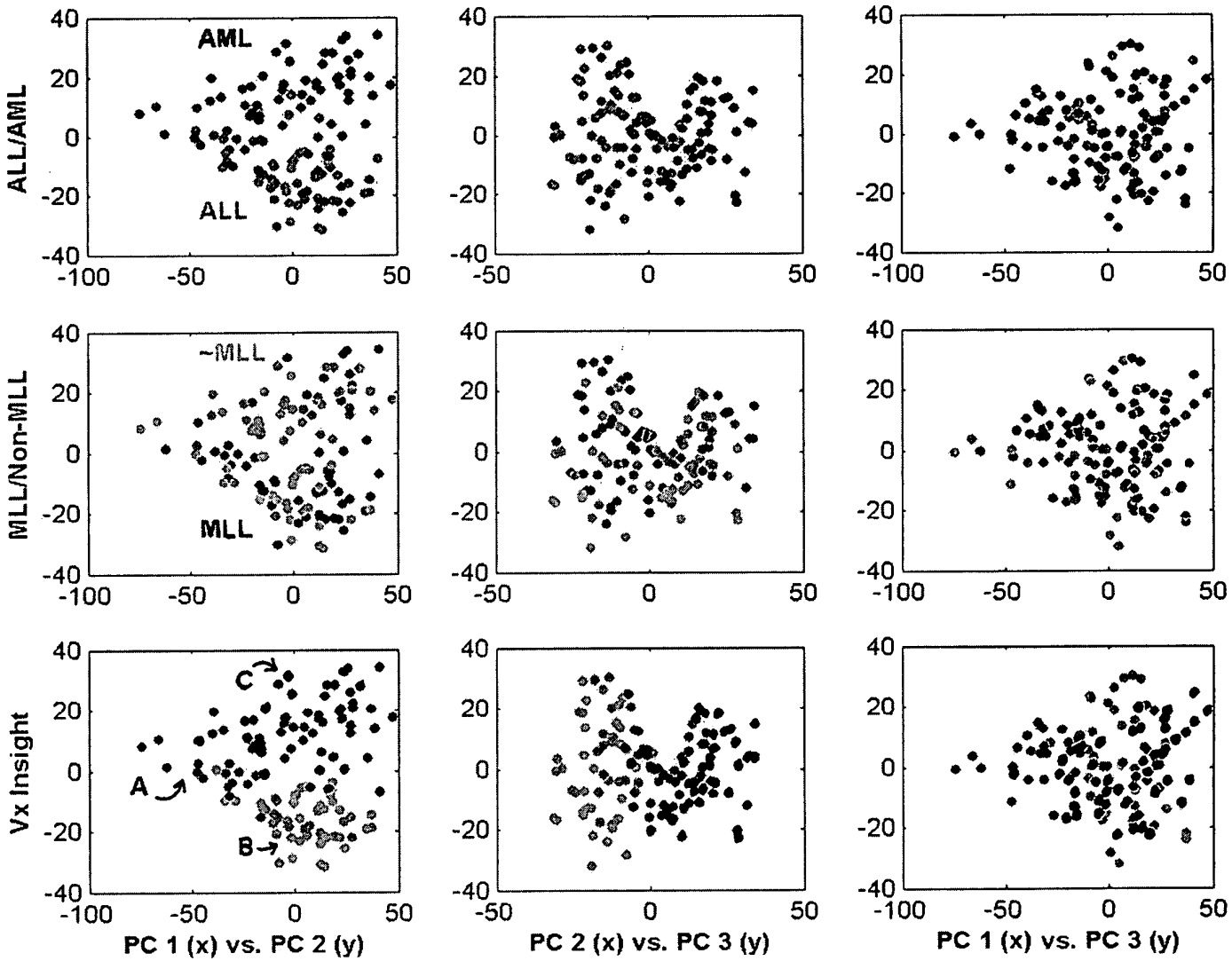

ALL/AML
MLL/Non-MLL
Vx Insight
AML
ALL
~MLL
MLL
A
B
C
PC 1 (x) vs. PC 2 (y)
PC 2 (x) vs. PC 3 (y)
PC 1 (x) vs. PC 3 (y)

Figure 9

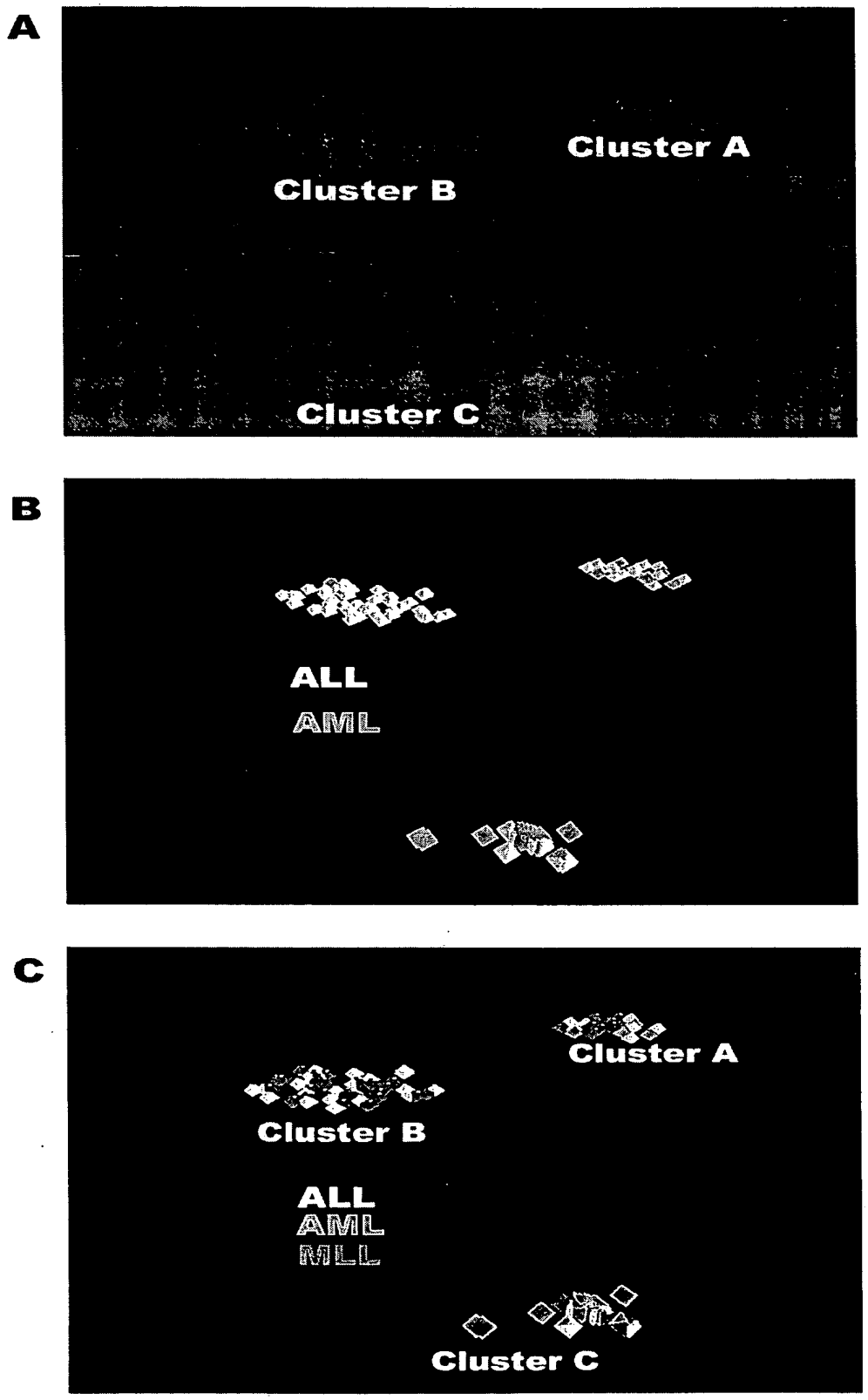

A
Cluster A
Cluster B
Cluster C
B
ALL
AML
C
Cluster A
Cluster B
ALL
AML
MLL
Cluster C

Figure 10

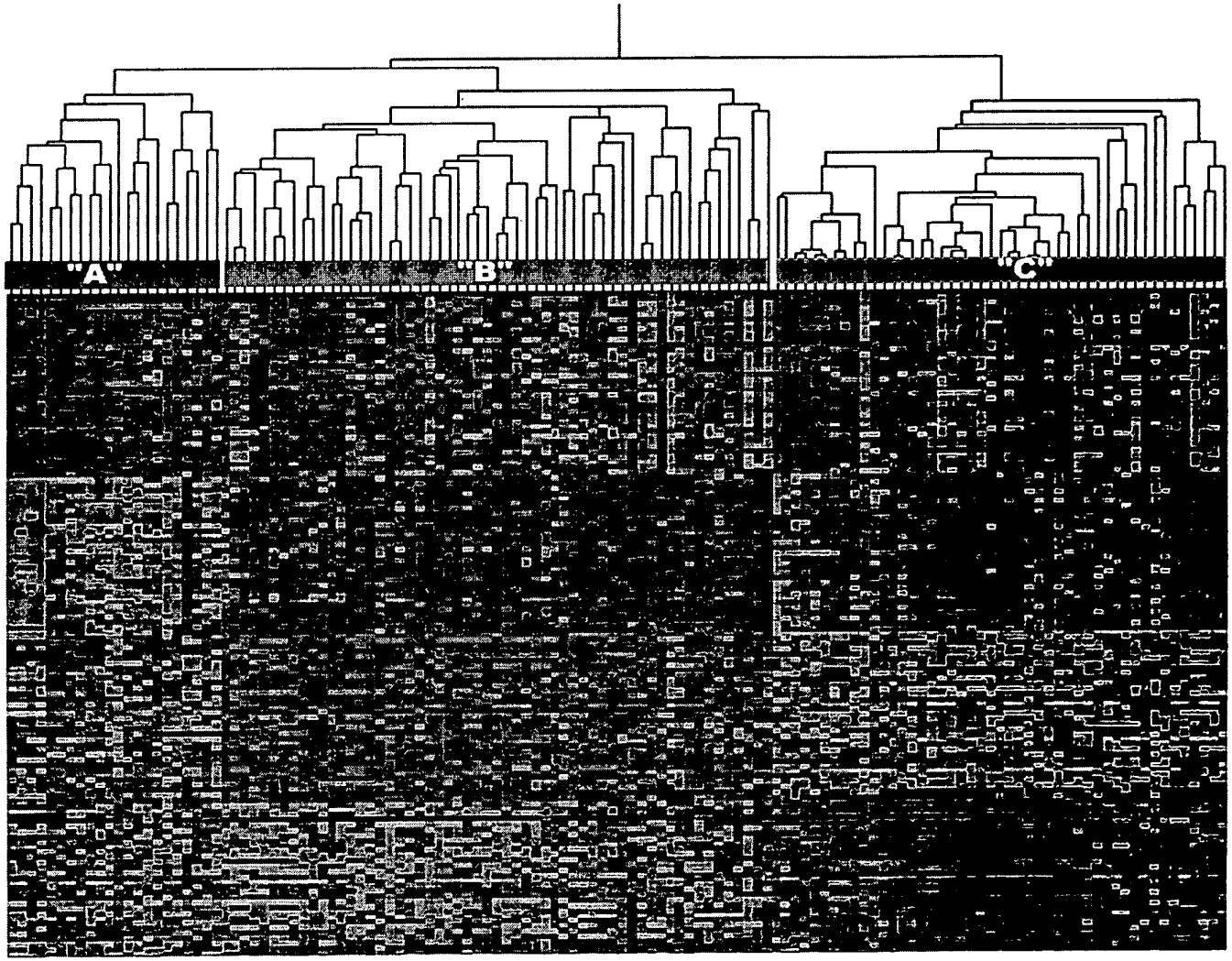
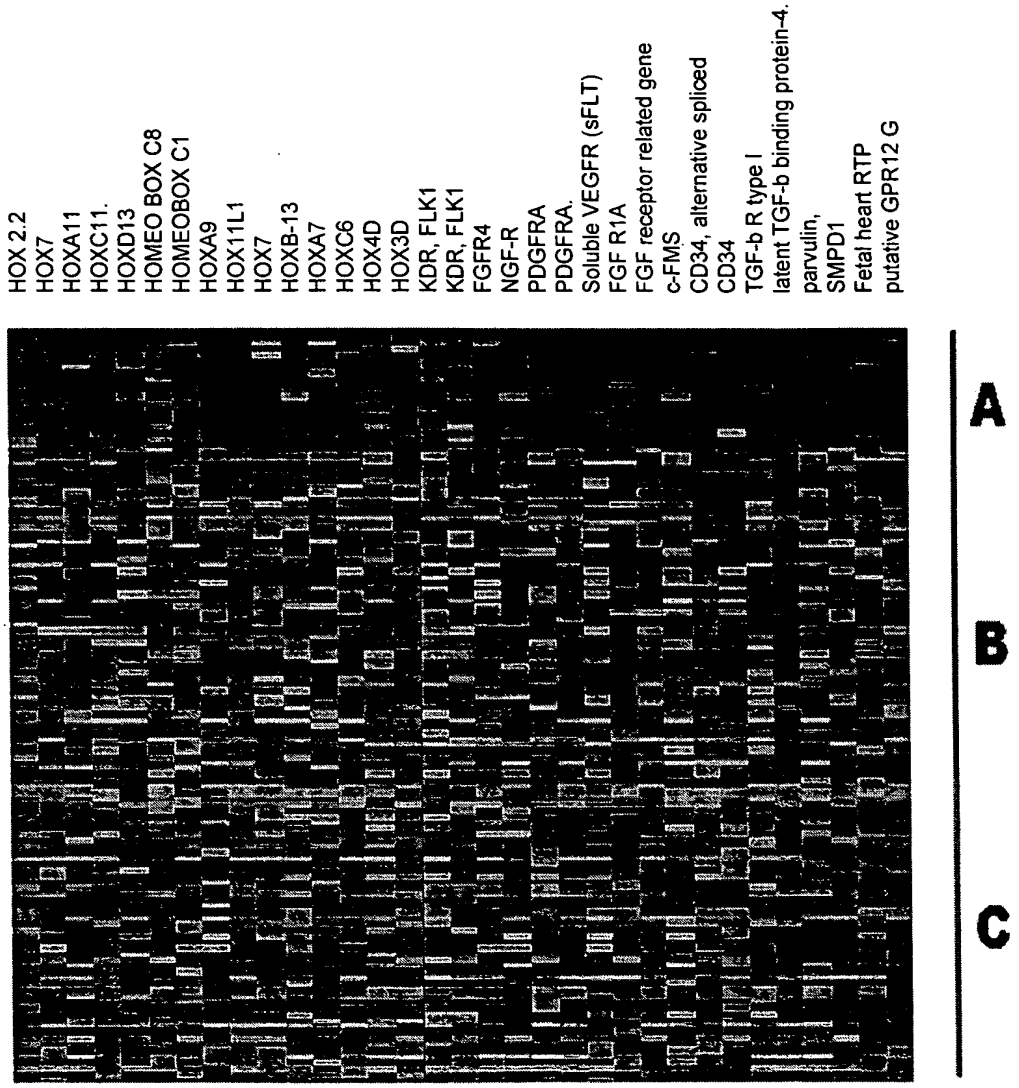


Figure 11

Figure 12A


HOX 2.2
HOX7
HOXA11
HOXC11.
HOXD13
HOMEO BOX C8
HOMEOBOX C1
HOXA9
HOX11L1
HOX7
HOXB-13
HOXA7
HOXC6
HOX4D
HOX3D
KDR, FLK1
KDR, FLK1
FGFR4
NGF-R
PDGFRA
PDGFRA.
Soluble VEGFR (sFLT)
FGF R1A
FGF receptor related gene
c-FMS
CD34, alternative spliced
CD34
TGF-b R type I
latent TGF-b binding protein-4.
parvulin,
SMPD1
Fetal heart RTP
putative GPR12 G
A
B
C
+4.0
1.0
0.1
Relative Expression

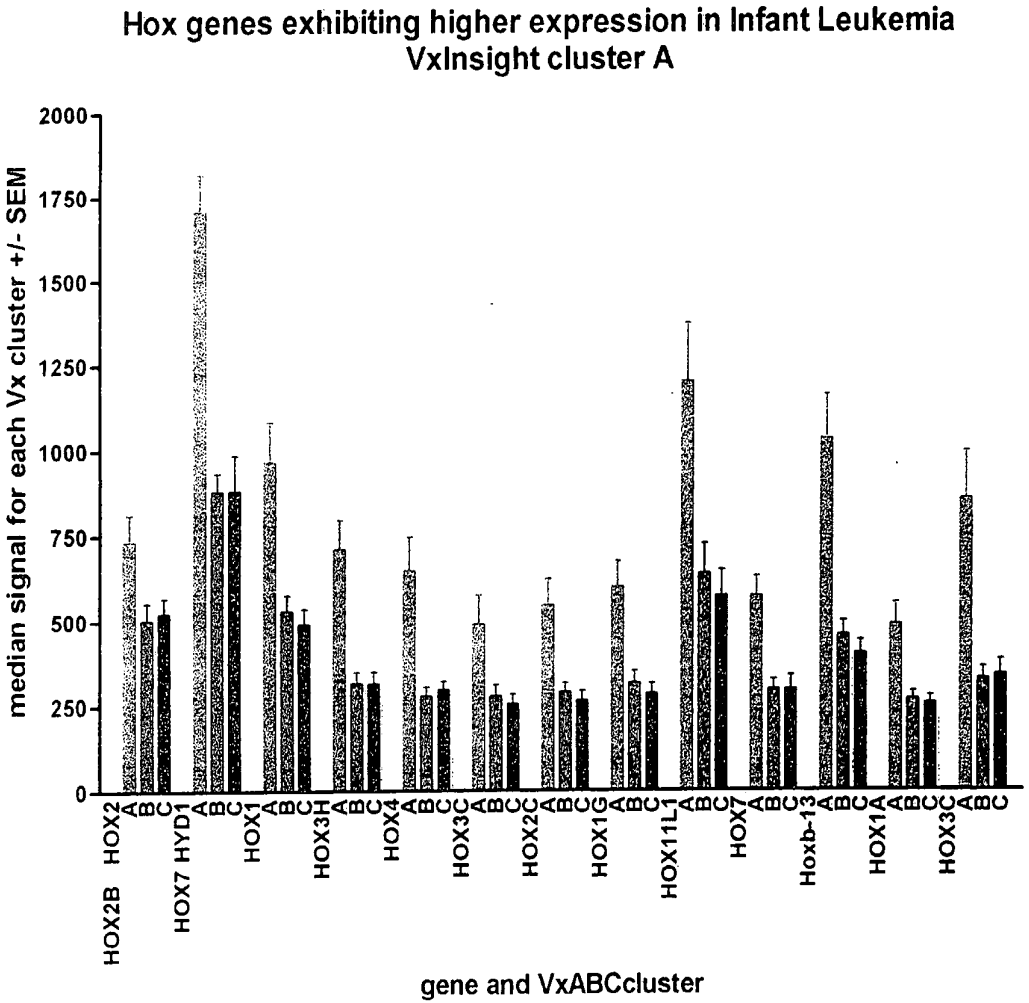

Hox genes exhibiting higher expression in Infant Leukemia
VxInsight cluster A
median signal for each Vx cluster +/- SEM
2000
1750
1500
1250
1000
750
500
250
0
HOX2B
HOX2
HOX7 HYD1
HOX1
HOX3H
HOX4
HOX3C
HOX2C
HOX1G
HOX11L1
HOX7
Hoxb-13
HOX1A
HOX3C
A
B
C
gene and VxABCcluster

Figure 12B

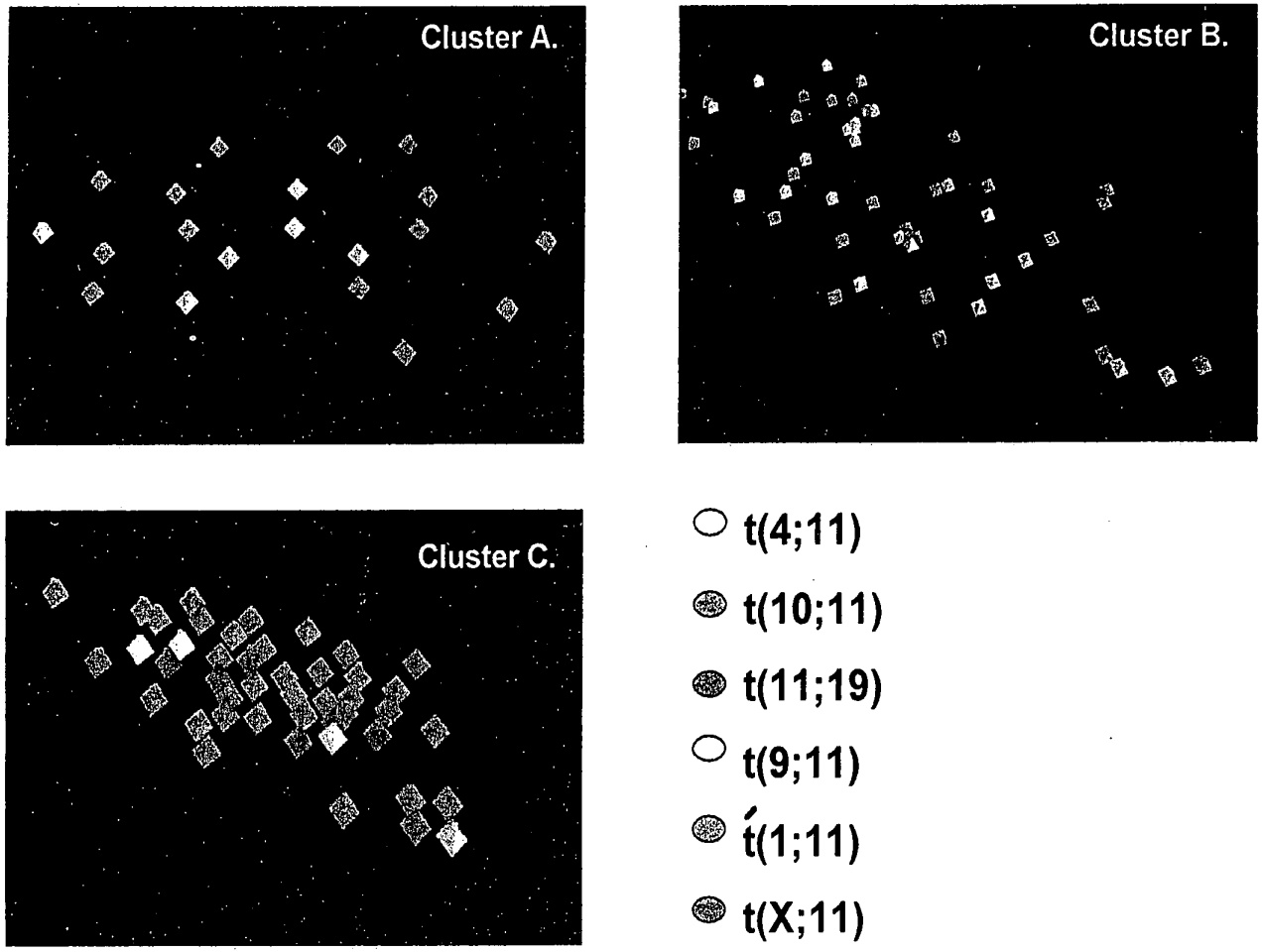

Cluster A.
Cluster B.
Cluster C.
t(4;11)
t(10;11)
t(11;19)
t(9;11)
t(1;11)
t(X;11)

Figure 13

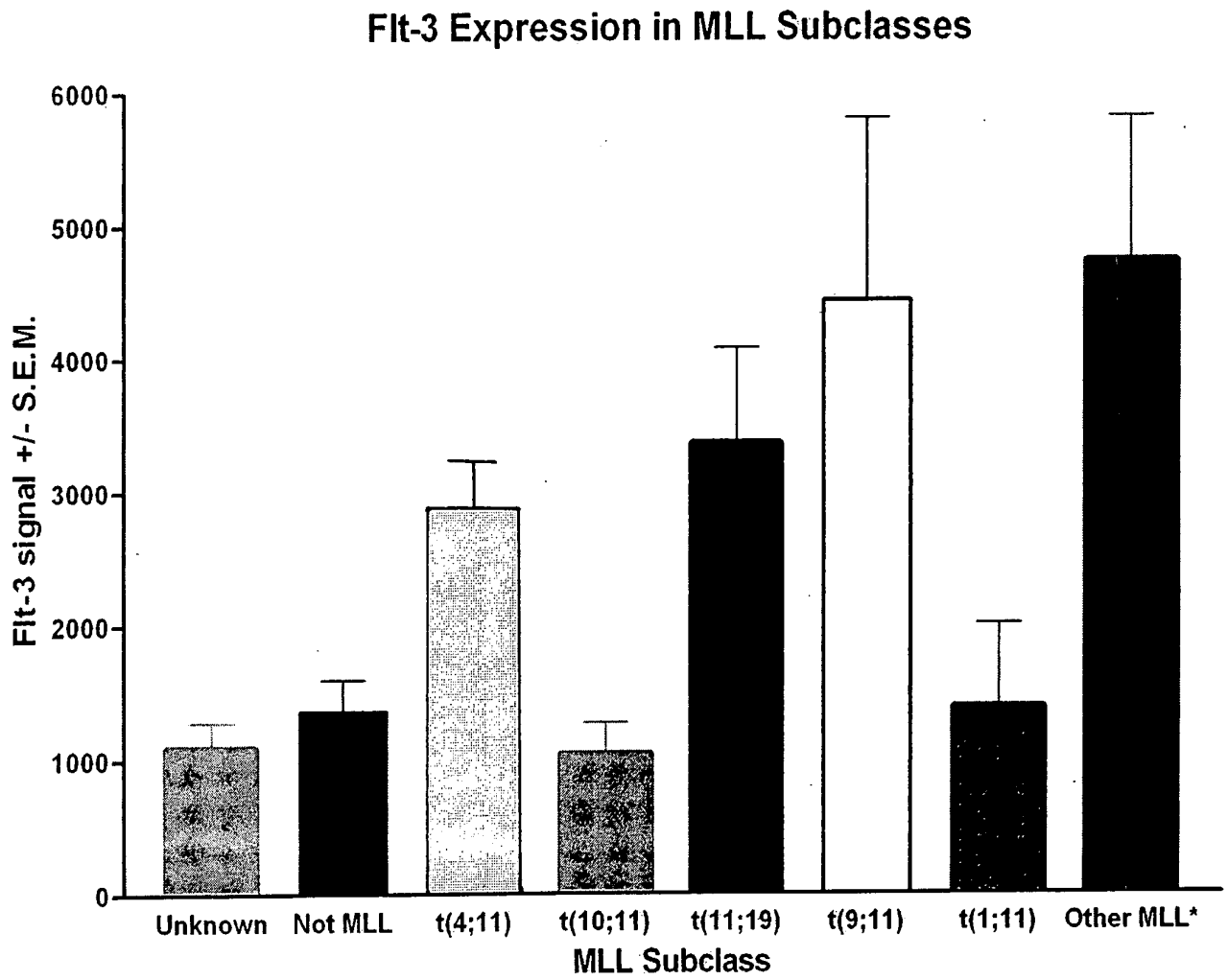

Flt-3 Expression in MLL Subclasses
Flt-3 signal +/- S.E.M.
6000
5000
4000
3000
2000
1000
0
Unknown
Not MLL
t(4;11)
t(10;11)
t(11;19)
t(9;11)
t(1;11)
Other MLL*
MLL Subclass

Figure 14

Contrast t(4;11) in A vs. B	Symbol
guanosine monophosphate reductase	GMPR
ephrin-A3	EFNA3
jumping translocation breakpoint	JTB
prefoldin 5	PFDN5
nuclear factor I/X CCAAT-binding transcription factor	NFIX
calcium/calmodulin-dependent protein kinase CaM kinase II	CAMKG
fibrinogen alpha chain isoform alpha preproprotein	FGA
sodium channel voltage-gated type IV alpha polypeptide	SCN4A
small nuclear ribonucleoprotein polypeptide A	SNRPA1
myosin-binding protein C slow-type	MYBPC1
similar to S. cerevisiae RER1	
S100 calcium-binding protein A4	S100A4
ubiquitin specific protease proto-oncogene	USP4
hydroxyacyl-Coenzyme A dehydrogenase	HADHA
ATP synthase H transporting mitochondrial F1 complex	ATP50
bone morphogenetic protein 1 isoform 4 precursor	BMP1
ribosomal protein 36AL	RPL36AL
sorting nexin 3	
chaperonin containing TCP1 subunit 8 theta	
transmembrane trafficking protein	TMP21
eukaryotic translation initiation factor 3 subunit 4	EIF3S4
B7 protein	B7

Contrast t(4;11) in A vs. B, Continuation	Symbol
kallikrein 3 prostate specific antigen	KLK3
poly rC binding protein 3	
small proline-rich protein 2C	SPRR2C
CD40 antigen	TNFRSF5
ubiquitin-conjugating enzyme E2I homologous to yeast UBC9	UBE2I
phosphate carrier precursor isoform 1a	PHC
phosphodiesterase 6G cGMP-specific rod gamma	PDE6G
erythroblast macrophage attacher	
v-yes-1 Yamaguchi sarcoma viral related oncogene homolog	LYN
integrin alpha 3 isoform b precursor	ITGA3
1-acylglycerol-3-phosphate O-acyltransferase	AGPAT1
epididymal secretory protein 19.5kD	NPC2
immunoglobulin-binding protein 1	IGBP1
eukaryotic translation initiation factor 3 subunit 7 zeta 66/67kD	EIF3S7
C1q-related factor	
ataxin 2 related protein isoform 2	
periplakin	PPL
erythroid differentiation and denucleation factor 1	
unknown protein LOC51035	
complement component 1 inhibitor	HAE
NADH dehydrogenase ubiquinone Fe-S protein	NDUFS3
small nuclear ribonucleoprotein D2 polypeptide	SNRPD2

Figure 15

MLL vs. not MLL	MLL_t(4;11) vs NOT	MLL_t(10;11) vs NOT	MLL_t(11;19) vs NOT	MLL_t(9;11) vs NOT	MLL_t(1;11) vs NOT	Other MLL
UBN1	BMI1	RUNX3	H2AFY	TRADD	FTL	VPS45A
HCLS1	MICB	SH3BP1	IGHG3	RPL26	PBEF	PSME2
KIAA0945	S100A11	HMGCR	FACVL1	TCFL4	LGALS3	LENG4
NFATC3	CG018	HGF	ERH	COX7C	PDXK	B2M
MD-1	DOK1	ESRRA	IRAK1	DOC-1R	HPR	CPD
TRA@	SYNGR2	CDKN1C	IL2RG	KIAA0476	GABARAP	UGP2
RAD9	WAS	MAP2	RPL18	ATP6V1G	TALDO1	CTSL
KIAA0453	FBXO9	EN2	SPAG6	MARS	BCL6	IGHG3
IQGAP2	PRKAR1A	SPR	SULT1A2	MRPL33	EPB72	PEX11B
FBP17	DOK1	HXB	SOX4	HSF1	S100A8	BST2
FLJ12443	LYN	TPS1	VCP	FBP17	RABGGTA	CASP1
CD4411p13	TIMP1	ENDOG	IGBP1	AHR	HIF1A	CAST
CRADD	ARPC2	GALR3	SNRPN	ZFR	CDA	B2M
NFATC3	ELF4	ORP150	MAGED2	KIAA0906	PTPN12	ASAH
KIAA0265	BASP1	SLC6A13	AREG	PLCG2	C20orf16	RAB2
H2AFO	BID	CG018	TACTILE	RAB33A	TIMP1	RAG1
KRT8	NDUFB8	RARRES2	CD97	PSMA4	CSK	TRA@
C20orf14	ITGB1	CHD3	LPXN	TRAP1	MAD	ISG15
BAG1	MLCB	KNSL2	TMSNB	PRKCB1	CTSD	EIF2S1
CGI-57	ATP6V0E	TNFSF9	ASMTL	RASA1	PTENP1	CRA
13033	COX7C	ENDOGL1	IMPDH2	TP53BP1	CUTL1	SCYA5
CHC1L	MAGED2	MGLL	LMNA	INPP5D	FLOT2	MADH2
KIAA0766	NUCB2	SLC7A1	CD72	NME2	MPP1	LTBR
PSR	ACTR2	MCCC2	CD79A	HMG14	CKAP4	TNFSF10
DPYSL3	OS-9	GIT2	MDK	MGC2840	DR1	ARPC2
SERPINB8	HLA-F	GEM	SERPINE1	TETRAN	HSPC022	PPP2R5C
HRI	PCMT1		CIC	PIK3CD	AKR1C2	CDK2

Figure 16

Bayesian t(4;11)	SVM t(4;11)	Fuzzy t(4;11)	DA t(4;11)
RPL5	CKAP4	POU4F1	TRA@
TRA@	BAX	APOC2	CST3
KIAA1157	CTGF	ECGF1	NFATC3
STS	ICAM3	S100A12	BLNK
NFATC3	PROML1	ITGAM	SDR1
KIAA0542	NR1H3	HK3	CTGF
UMPK	BLNK	CES1	KIAA0585
RPS16	SDR1	MNDA	ICAM3
BLNK	CST3	CSPG2	KIAA0020
KIAA0970	RAB33A	RAB32	PKD2
NACA	LY117	CXX1	BLK
RPS28	PLAGL1	EPB41L3	RAB33A
NFATC3	DNTT	SCYA5	NFATC3
RAD9	SUCLA2	CKAP4	LCP2
JUND	TANK	CTSG	KIAA1157
HAT	MN1	MACS	STX1A
RPL8	GBP1	HDC	BCL11A
RPS9	RDX	ITGA7	H2BFL
SYNGR1	MACS	FCER1G	LSP1
DKFZP564M1462	LC27	HOMER-3	PLAGL1
RPL32	LSP1	CSPG2	SLC35A3
UBN1	KIAA0020	DNCI1	TANK
RRBP1	RGS13	LC27	RUNX1
KIAA0907	ICAP-1A	CSTA	RECQL
	STX1A	GS3955	GNA15
	LOC54103	GRN	LOC57187
	FBN1	MSE55	CSRP2
	KIAA0471	CRA	CD72
	SCHIP1	ITGB2	KIAA0471
	KIR3DL1	ALOX5	RDX
	LCCP	DNTT	STAT12
	LOC57187	ICAM3	FLT3
	HRY	SNN	LOC54103
	TIMP1	S100A11	CKAP4
	KIAA0429	TLR2	NFATC3
	BID	IL6	CTSH
	ZW10	SLC16A3	ICAP-1A
	GTPBP1	PECAM1	HSU79252
	PFN2	DXS9928E	SDHC
	UBE2G1	JUN	FNBP3

Bayesian MLL	SVM MLL	Fuzzy MLL	DA MLL
UBN1	MKI67	HDC	NR1H3
HCLS1	UTRN	POU4F1	CUL2
KIAA0945	C8orf2	SPAG6	FLT3
NFATC3	ACTG1	HBZ	PRH1
MD-1	NUP153	GPM6B	RBM10
TRA@	GAS7	CSRP2	HOXA9
RAD9	UMPK	CHRNA7	NFATC3
KIAA0453	ERBB3	ITGA2B	NIPSNAP1
IQGAP2	TMOD	CCND2	FLT3
FBP17	CAD	TRB@	AF038169
FLJ12443	SLC25A16	LC27	PROML1
CRADD	AHCY	CREM	ALOX5AP
NFATC3	TOP3B	AKR1C3	HSPB2
KIAA0265	BAIAP3	H2AFN	SMAP
H2AFO	PRKCQ	H3FB	ADCYAP1
KRT8	PSMF1	GATA2	DKFZP586I111
TOM	TRIM33	ALOX5	GIT2
BAG1	PPIC	FOLR3	MMP1
CGI-57	FLT3	CD3D	IRAK1
CHC1L	MDH1	MME	MME
KIAA0766	MAP4	IL6	TNFRSF5
KIAA0585	LILRA3	KIAA0453	MGST3
DPYSL3	STAT4A	DKFZP586I111	RNAHP
SERPINB8	BIK	RPP14	CD38
	D123	KLF1	KIAA1218
	KIAA0806	CSPG4	CAPG
	ZNF146	VRP	MSX1
	TOP2B	PRL	KIAA0976
	XRCC5	PRKCZ	SUPT4H1
	NCOR1	OSTF1	CDK5R2
	CFLAR	HOXB2	RECQL
	CD37	PSMD13	LGALS1
	ACK1	KIAA0960	PNLIPRP1
	BAT8	IGHG3	GPM6B
	B1	M6A	FBN1
	KIAA0595	NR4A3	IL17R
	LCE	KIAA0766	TLR1
	CBL	PDGFA	LU
	KIAA0470	DLK1	MAPK9
	LIF	TERF1	LIM

Figure 17

Contrast t(4;11) vs. NOT		Contrast MLL vs. NOT
B lymphoid tyrosine kinase		fms-related tyrosine kinase 3
short-chain dehydrogenase/reductase 1		prominin mouse like 1
FK506 binding protein 12-rapamycin associated protein 1		fms-related tyrosine kinase 3
protein kinase D2		FK506 binding protein 12-rapamycin associated protein 1
deoxynucleotidyltransferase terminal		cysteine and glycine-rich protein 2
cystatin C amyloid angiopathy and cerebral hemorrhage		phosphoserine aminotransferase
B cell linker protein		B lymphoid tyrosine kinase
CD19 antigen		villin 2
runt-related transcription factor 1 acute myeloid leukemia 1 aml1		KIAA0766 gene product
regulator of G-protein signalling 16		beta-tubulin cofactor D
hypothetical protein FLJ10173 NM_022893 B-cell CLL/lymphoma 11A		H2B histone family member Q
purinergic receptor P2X ligand-gated ion channel 5		purinergic receptor P2X ligand-gated ion channel 5
villin 2		integrin alpha 4 precursor
guanine nucleotide binding protein G protein alpha 15 Gq class		phosphorylase kinase gamma 1 muscle
myosin light polypeptide 1 alkali skeletal fast		CD72 antigen
myristoylated alanine-rich protein kinase C substrate		KIAA0189 gene product
intercellular adhesion molecule 3 precursor		Meis1 homolog
hypothetical protein		uridine monophosphate kinase
MAD mothers against decapentaplegic Drosophila homolog 2		fibrillin 1
Wilms tumor 1 isoform A		guanine nucleotide binding protein G protein alpha 15 Gq class
cathepsin H		KIAA0676 protein
Wilms tumor associated protein		amyloid beta A4 precursor protein protease nexin-II Alzheimer disease

Figure 18